

Cases of mushroom poisoning are apt to increase, due partly to an increased interest in the vegetable diet and an effort to find meat substitutes. Mushrooms in our shops are more abundant than formerly. Many more are used as food and as they are relatively expensive, people of moderate means who enjoy savory food are apt to seek in nature forms which they believe edible.

The movement of "Back-to-the-farm" for the city man, the Boy Scouts for the student, the high cost of living for everybody and an increased interest in nature study are other factors which will lead to an increase of poison cases. At present the greatest danger arises from children or from the poorer class of adults who see foreign-born laborers scouring the fields and woods for edible forms of mushrooms. Now, it happens that these foreigners think they know edible kinds and are careful to gather these alone or else they know how to render a dangerous kind harmless by certain methods of preparation. But the American does not with certainty identify his mushroom but gathers those which "look just like" those gathered by the foreigners and is apt to add a number of cases to the annual death list. The death rate from the "destroying angel" (*Amanita phalloides*) cases is over 52 per cent.—children are more susceptible than adults and there is one clear record of a death from eating one third of the top of an *Amanita*. With these facts in mind, perhaps the best advice is that given by a mother to her child, who seeing me gather some edible forms tried to imitate me; as children will do. The mother said: "Child, that man knows what they are, but for you they are *all* poison."

(To be continued)

A NEW MERTENSIA

BY GEO. E. OSTERHOUT

Mertensia media sp. nov.

Stem rather slender, 2–3 dm. high, glabrous or sparingly appressed pubescent, flowering branches from near the middle,

leafy to the top; the leaves all narrowly linear from a broad base, 3-6 cm. long, about 5 mm. wide, the upper shorter, equaling or surpassing the inflorescence, appressed pubescent on both surfaces, the midrib prominent; flowers many in close clusters on ascending peduncles, the pedicels hirsute pubescent, the calyx 3-3.5 mm. long, divided to very near the base, the lobes narrowly linear, glabrous except the ciliate margins, the corolla about 10 mm. long, the tube and limb about equal in length.

Mertensia media belongs to the Lanceolateae, and, following Dr. Rydberg's Key in the Flora of Colorado, its characters lead to *M. lateriflora* Greene or *M. amoena* A. Nelson; but it is quite a different plant, noticeably in the pubescence. *M. lateriflora* has "the whole plant canescently silky-strigose," and *M. amoena* is much the same. It is a taller plant than *M. amoena*, the leaves are longer and more pointed, the calyx lobes are narrower and less ciliate. In general appearance it closely resembles *M. lanceolata* (Pursh) DC. Collected at Palmer Lake, El Paso County, Colorado, May 24, 1913; no. 4882.

WINDSOR, COLO.

SOME EFFECTS OF EXCESSIVE HEAT IN NORTHERN MICHIGAN*

BY HENRY ALLAN GLEASON

During the last week of July, 1917, a heat wave of unprecedented intensity spread over the region of the Great Lakes. At numerous stations of the Weather Bureau temperatures in excess of 100° F. were recorded. At the biological station of the University of Michigan, located seventeen miles south of the Straits of Mackinac, all previous records for high temperatures were passed. On July 29, the temperature was above 90° for over nine hours, and reached a maximum of 101°. The following day a maximum of 93° was recorded. On July 31, the temperature was above 100° for over five hours, with a maximum of 104°, and above 90° for eleven hours. During these same days the minimum was also unusually high, remaining above 80° for three and a half days continuously.

* Paper No. 166 from the Botanical Laboratory of the University of Michigan.